

## SHADOW DANCING

**T**HE interesting and unusual photographs reproduced on this page shed a new light on methods used by devotees and teachers of classic dancing in procuring their charming effects of naturalness and spontaneity in rhythmic motion of the entire body. They are "laboratory material," so to speak, in the studio of Miss Helen Moller, the American priestess of "natural dancing" who, with her pupils, has become an established feature in the art life of New York City.

"In teaching the natural physical expression of emotion in rhythmic movement," says Miss Moller, "you can't escape a certain amount of scientific study. The rudiments of anatomy, to familiarize you with each separate muscle, sinew and joint, must enter into your scholarly equipment. But bare theory isn't enough. The pupil must be enabled to see those muscles, joints and sinews in action under the brain's command.

"Of course I am always illustrating for my pupils, dancing for and with them, but that shows little more than the general effect—the constantly changing motion presents only a flash of each detail. I found it desirable to construct a sort of alphabet of postures in which essential details would be prominent and could be fixed for deliberate study. Naturally it was photography that solved the problem."



A Camera Silhouette Fixing for Deliberate Study the Correct Poise of Arms and Hands to Express Admiration of a Growing Plant in Flower.

Being herself a capable amateur photographer, familiar with most of the possibilities of that art, Miss Moller decided that photographic silhouettes, "snap shots" of the dancing figure, would best serve the purpose she describes. The figure "snapped" against a background of strong daylight would give a clearness of outline not otherwise to be obtained. Fortunately for this emergency,

Miss Moller's dancing studio has broad windows fronting on Central Park high up in a towering building. So she was able to use those windows for the background of her poses before the camera without danger of challenging the admiration of multitudes outside. And several examples of the result are presented on this page.

One charming pose is by Miss Emily Illingworth, the most ad-



Miss Helen Moller Poised at the Window Ledge in Her Studio Ready to Begin Her Series of Illustrative Shadow Dances to Instruct Her Pupils in Details of Muscular Action in "Natural Dancing."

vanced of Miss Moller's pupils, who appears with her at the Delmonico dinner dances, at the Blitmore, the Paderewski Polish Fund benefits and elsewhere. This posture illustrates the technique which enters into the management of the shoulders, neck and head.

The full-length silhouette of Miss Moller with the flower fixes by photography the recognized principle that the true physical expression of any natural emotion flows from the upper torso—the heart. "As a little girl out on the Min-

## The Ingenious System of Camera Silhouettes Devised by Helen Moller to Enable Her Pupils to Study Details of Muscular Action in Classic "Natural Dancing"



Four of Miss Moller's Pupils Observe Her Management of the Entire Figure in Expressing Pleased Wonder at Sight of a Young Plant Pushing its First Shoots Through the Soil.

nesota prairies," laughed the dancer, "where I was always dancing like a wild, free creature, I used to call this my 'great secret.' I could not endure the sight of arms and legs flinging themselves about like mere appendages while the body itself remained rigid, especial-

ly the region of the chief vital organs, taking no part in the joyous manifestations. I thought that this was my own priceless discovery—that the heart region is both the psychic and the physical centre of gravity, and that there can be no true and graceful physical

expression of mind and soul which does not spring from that centre. "Later, of course, I learned that Francois Del Sartie had preceded me with that discovery by more than half a century. When you consider that, and the influence of the Deisartean philosophy and system upon the modern art of acting, especially in Europe, it seems astonishing that so many famous dancers appear to have rigid, wooden chests." This priestess of "natural dancing," with feet bare and body and limbs unfettered by unnecessary drapings, is careful to explain that very young children require the very smallest amount of technical study and training. "They have no self-consciousness," she says. "Out of doors, relieved of needless clothing—which all children instinctively detest—they are as naturally graceful as are all young animals. But, different from their four-footed friends, they have complex emotions and are easily taught to give them rhythmic physical expression. "With older pupils, having fixed physical habits and mannerisms, a large amount of technical detail has to be gone through. With such pupils I find my silhouette alphabet of fundamental movements very useful."



In This Silhouette Miss Moller's Pupils Are Able to Note Just What Muscles Cooperate in Sustaining Perfect Balance of the Figure in a Difficult Pose.



Here Miss Emily Illingworth, an Advanced Pupil and Assistant Gives a Shadow Pose Illustrating the Distribution of Muscular Action in the Figure of a Nymph Drinking from a Shell.



Miss Moller in a Trying Moment of the Shadow Dance, Showing the Tense Muscles of the Supporting Leg Contrasted with the Airy Grace of Uplifted Arms.



Another Silhouette by Miss Illingworth Illustrating a Moment in the Dance When the Arms and Torso Are Free and Muscular Energy is Concentrated in the Legs and Feet.



Here Miss Moller Fixes in a Silhouette Detailed Management of the Muscles and Articulations in a Trying Moment of a Dance Expressing Joyous Abandon.

## How Neglected Teeth or Bad Dentistry Are the Cause of Many Diseases

By W. F. Johnston, D.D.S.

"If a tooth offend thee, pluck it out." This was quite true centuries ago; even a decade or two back. Dentistry then, if we may style it such, consisted principally of "tooth pulling." This operation, as a rule, was performed by the village barber or the nearest blacksmith the sufferer could find. Later dentistry gradually grew apace and was recognized as a profession. "Today dentistry and medicine are so closely allied that dentistry is really a specialty of medicine. For many years physicians have realized that diseased teeth and poor health are associated. It is impossible to successfully treat dyspepsia, anaemia (poor blood) or malnutrition unless the teeth and gums have been properly attended to and put in a sanitary condition. The relation between such conditions and bad or missing teeth is readily understood. Sufficient chewing and mixing of the food with the saliva, necessary for stomach digestion, is an utter impossibility if the teeth are missing or deficient. Not only is the food under these conditions taken into the stomach in an unfit condition, but it is also mixed with the discharges from diseased teeth. This further impairs the work of the stomach. Naturally the teeth and stomach having been unable to perform their proper functions the result is a faulty nutrition and poor blood. These facts have been known to physicians and dentists for a long time. Recently, in the last

three or four years, a new danger has appeared, the blind, painless dental abscess. This little spectre has turned topsy-turvy the members of the medical and dental professions. What is a blind abscess? It is a little pocket burrowed in the bone by pus. It is found at the end of the root of a dead tooth. What causes it and how did it get there? It is caused by germs whose pernicious activity results in pus. And the pus forms the pocket. The germs may come in consequence of the natural death of the tooth pulp (nerve). They also may come from the ineffectual attempt of the dentist to remove all the pulp from the root. Another source is the faulty filling of the root canal after the pulp or nerve has been removed. These germs multiply rapidly once they become established in the pocket. How may we detect these blind painless abscesses? Neither the patient nor the dentist has the slightest idea of this most dangerous condition, because these abscesses cause the patient no pain, soreness, swelling or local discomfort. If we only knew it, how many beautiful crowns, fillings and pieces of bridgework are but the periscopes of these sinister and dangerous little abscesses. The unsuspecting patient, having no discomfort from his teeth wonders why he is sleepless, tired and run down. Possibly he is suffering from one or more diseases caused by one or several of these tireless little abscesses, hard at work every minute of the day and night supplying

dearly poisonous germs to the blood. These germs get into the blood for the very simple reason that they can get nowhere else. They are sealed in the jawbone, which they gradually eat away and then enter the blood on their mission of destruction. At the outset these germs may be few and weak; many are killed by the blood. Nevertheless, in time, they multiply in number and increase in strength. They then enter the blood in a vast army. The long continued fight against these deadly germs gradually impairs the resistance of the blood. It is now powerless to stop their progress, and the blood only serves as a means to carry these enemies of health to various vital centres of the human body. They here entrench themselves and carry out their deadly work. Now that these germs have located in some other centre, they multiply very rapidly and may cause disease and even death. These heretofore unsuspected germs have caused heart disease, arthritic deformations, nervous diseases, kidney, liver and stomach complications. Some surgeons claim they have even caused appendicitis. This disease has been traced to the pernicious activities of these little germs emanating from the blind dental abscess. Of course, the blind painless dental abscess is not the only cause of heart disease. It is only one of many causes. However, it is a proven fact that these germs of the blind dental abscess do cause heart disease in many instances. They are deposited by the blood in one of the

valves of the heart. They and their secretions irritate the part to which they are attached, resulting in the formation of a small ulcer. These ulcers will cause a breaking down of the valve tissue of the heart. The valve in consequence gives way. The victim has now what is known as heart trouble. Small abscesses are also charged with wrecking the nervous system. Sometimes only one nerve or a group of nerves is affected, such as the nerves supplying the jaws, ears, eyes, hands or fingers, or it may even be the brain or the spinal cord. Nervous disorders arising from these same germs may be headache, neuralgia, lassitude, or great fatigue and depression. A well-known business man of this city who for years possessed a rugged constitution, a wonderfully cheerful disposition and a clean record for consistent good health, suddenly lost all interest in his business, tired almost before he finished breakfast, and in a short period developed melancholia. His physician gave him a most thorough examination. While he was unable to discover any organic or functional disease, he noted upon examining his mouth that his teeth were seemingly in an excellent condition. Nevertheless he saw two or three pieces of bridgework reflecting great mechanical ability on the dentist who made them. But this physician realized that bridgework and dead teeth were quite frequently associated. He realized the possibility that one or more of these teeth supporting these bridges might harbor a

hidden blind abscess at the root. He was immediately dispatched to his dentist for a complete X-ray examination. His suspicions were more than justified. The X-ray pictures showed that not only one but every tooth supporting the bridgework was affected with a blind painless dental abscess. The bridges were immediately removed. The abscesses were either cured or the root removed. In a short period this patient regained his health and normal spirits. The blood may carry a few of these germs to the fluid of a joint in which they rapidly multiply. This causes the joint to swell and become fixed and stiff with attendant pain. The limbs are pulled into all sorts of unnatural positions and the patient now has arthritic deformations. On the other hand, it may be possible for a person to have one or more blind dental abscesses and yet be free from any of the above diseases. However, the blood is being overtaxed fighting these germs and its resisting power is being lowered. This may continue for days, months or even years. Eventually these germs will find some weak spot in the body and cause havoc with the subject's health. There is but one safe procedure when a blind or any other kind of an abscess has been discovered, and that is to cure it, or if that is impossible to remove the tooth. A few years ago an abscess, whether acute or chronic, outside of its discomfort was no great cause for alarm. It is only recently that its deadliness has been realized and proven.